



City of Nashua
Wastewater Fund Rate/Revenue Requirement Analysis
March 2011

Wastewater Fund Rate/Revenue Requirements Analysis

- Analysis of the Wastewater Fund for FY10 and projections through FY19
- Current issues impacting the Wastewater Fund include:
 - EPA Consent Order - \$73M Capital Projects
 - Aging Infrastructure – sewer system & treatment plant
 - Decreased Volume
 - State Aid Grant Funding – Revenue Reduction of \$20M over 9 years

Wastewater Fund Rate/Revenue Requirements Analysis

Assumptions

- User Fees calculated using a Volumetric Rate + Demand Rate
- Current Average Quarterly User Bill:
 - ▣ Residential \$59.75 @ 2,500 Cubic Feet (cf)

Wastewater Fund Rate/Revenue Requirements Analysis

Background

- Last rate analysis completed February 2009 resulted in 15% user fee rate/revenue increase effective July 1st of FY10.
 - FY10 Rate Increase:
 - 15% Increase User Fee Rate/Revenue Approved
 - 15% Revenue Increase = 27% Increase Volumetric Rate + 0% Increase Demand Rate.
- History of Rate Adjustments:
 - FY04 Volumetric Rate Reduced from \$1.67 to \$1.22 per 100 cf
 - FY10 Volumetric Rate Increased from \$1.22 to \$1.55 per 100 cf

Wastewater Fund Rate/Revenue Requirements Analysis

Recommendations

- Approval of a 15% increase in the wastewater user fee rates effective July 1, 2011:
 - FY12 Volumetric Rate Increase from \$1.55 to \$1.78 per 100 cf;
 - FY12 Average Quarterly Residential Demand Charge Increase from \$21.00 to \$24.15;
- Approval of capital project debt financing in the amount of \$15,492,453.

Wastewater Fund Rate/Revenue Requirements Analysis

Revenue Analysis

- The wastewater user fee rates are comprised of two components – volumetric and demand. It is recommended that the rate increase be applied to both components.
- Increasing both rate components spreads the rate increase more evenly among all customers and provides the City with a more consistent source of revenue.
- The demand charge is more constant and would allow for improved forecasting. The volumetric component is more volatile and has resulted in revenues lower than originally forecast.
- In order to achieve the necessary revenue requirements by applying rate increases to the volumetric component only, the percentage increase in the volumetric rate would be 26%.

Volumetric & Demand Rates **Recommended FY12**

Rate Increase	Average Quarterly Billing Increase
15%	\$8.96

Volumetric Rate Only FY12

Rate Increase	Average Quarterly Billing Increase
26%	\$10.08

Wastewater Fund Rate/Revenue Requirements Analysis

Community Comparison

- Below is a comparison of current user fees for Nashua residents to similar communities in New Hampshire:

	Nashua	Derry	Manchester	Concord	Keene
Volumetric Rate/100 cf	\$1.55	\$2.98	\$3.24	\$3.95	\$5.52
Fixed Charge – Avg. Quarterly	\$21.00	\$35.66	\$19.00	\$35.86	\$22.18
Avg. Quarterly Residential Bill	\$59.75	\$106.43	\$100.95	\$131.34	\$160.18

Wastewater Fund Rate/Revenue Requirements Analysis

State Aid Grant (SAG) Program – Funding Deferral

- The Wastewater Fund receives most of its revenue from user fees. The Fund also received funding through the State Aid Grant Program towards the cost of wastewater projects.
- The SAG Program was deferred in FY09 and as a result the City has not received any SAG funds on new completed projects since the deferral.
- The State continues to defer funding of State Aid Grants for new projects.
- The deferment reduced the City's anticipated grant funds for wastewater related projects by approximately \$20 million over the next nine years.
- To be responsible the current Wastewater Fund Rate/Revenue Requirement Analysis does not include any future SAG revenue at this time.

Wastewater Fund Rate/Revenue Requirements Analysis

- The table below shows the comparison that the 2011 Rate/Revenue Analysis projected rate increase is consistent with the projections of the 2009 Analysis.
- The deferral of the State Aid Grant Program will have a direct impact on future projected rate increases.
- With several major projects completed, underway, or in the pipeline, the deferment of the SAG program puts and additional strain on the fund and the need for additional user fees.
- Any reinstatement by the State of the SAG program would be welcomed and would help to mitigate necessary rate increases in future fiscal years.

2009 Rate/Revenue Analysis With SAG Funding

Projected Rate Increases	FY10	FY11	FY12
	15%	0%	15%

2011 Rate/Revenue Analysis Without SAG Funding

Projected Rate Increases	FY10	FY11	FY12
	15%	0%	15%

Wastewater Fund Rate/Revenue Requirements Analysis

Cost Analysis

▣ Capital Equipment Replacement

- The Analysis includes the cost of operations, several capital projects, as well as an updated capital equipment replacement schedule.
- Capital equipment replacement costs for the next three fiscal years are projected as follows:
 - ▣ FY12 \$3,452,000
 - ▣ FY13 \$1,173,000
 - ▣ FY14 \$1,028,000

Wastewater Fund Rate/Revenue Requirements Analysis

□ Capital Project Financing

- It is recommended the City approve capital project debt financing in the amount \$15,492,453 as detailed below.
- The City currently has given authority to debt finance the Screening & Disinfection Facility
- The debt financing would be through the State Revolving Loan Fund (SRF) at a rate of 2.864%. Specific debt schedules are included in the Analysis Schedule E.

Screening & Disinfection Facility	\$22,639,197	*
<i>* Approved R-09-176</i>		
Storage Tank (Consent Decree Project)	\$ 5,764,964	
Aeration Blower Upgrade	\$ 4,160,973	**
Dewatering Equipment Replacement Project	<u>\$ 5,566,516</u>	**
Total	\$15,492,453	

*** Town of Hudson Contribution (12.58%) \$1,223,718*

Wastewater Fund Rate/Revenue Requirements Analysis

Summary

- Moving forward with the recommended revenue increases and debt financing should allow the City to:
 - Fund normal operating costs;
 - Meet the EPA Consent Decree deadlines;
 - Adequately fund reserves for future equipment needs;
 - Fund improvements to infrastructure – sewer system & treatment plant
 - Pay for debt incurred to fund large capital projects not paid for with reserves or unrestricted net assets.